

Minutes-Thursdays, March 8, 2007

## **State Well Drillers and Pump Installers Examining and Advisory Board**

Board Members Present: Art Becker, Robert Stothoff, Anthony Tirro, Richard Dalton, Karl Muessing, Peter Demicco

Board Members Absent: Norman Primost, Joseph Pepe, Sr.,

Other DEP staff present: Holly Papp, Pat Bono, Steve Reya, Brian Buttari, Michael Schumacher, Julia Altieri, Fred Sickels, Vince Monaco,

Other members from the Public in attendance: Benjamin Primost (New Jersey Groundwater Association/Pickwick Well Drilling, Inc.), Paul Bent (Pathways Government Relations, LLC), Russell Bent (Pathways Government Relations, LLC), Gus Schultes, IV (A.C. Schultes), Ed Lopez (Morrison Inc.), Mike Rash (Morrison Inc.), Rock Morrison (Morrison Inc.)

- 1. Call to Order** – The meeting was called to order by Acting Chairperson, A. Becker, at 9:40 AM with a quorum present.
- 2. Review of Minutes (Open and Executive Sessions) from Jan. 11, 2006 Board Meeting** – A motion to accept the minutes without change was made by R. Stothoff and seconded by A. Tirro. All members except P. Demicco, who abstained since he did not attend the January meeting, approved the motion.
- 3. Review of Certification of Applicants for the April 10, 2007 – Master Well Driller, Journeyman, and Journeyman B Well Driller Exams**– H. Papp informed the Board that one applicant, John Robbins, was listed as “pending” on the applicant roster for the Master Exam. This was due to the fact that Mr. Robbins was issued a Settlement Offer Letter (SOL) several years ago for drilling a well under an expired permit but had not paid the fine. Mr. Robbins had reportedly responded to the SOL, claiming that the permit was valid for two years, since the Department had recently passed regulations that stipulated that domestic well permits were valid for two years. He had never received anything further from the Bureau so he assumed that the issue was resolved. H. Papp stated that she needed H. Chudzik, DAG, to review the issues and determine whether or not Mr. Robbins violated Department Regulations. If it is determined that the SOL should be rescinded, Mr. Robbins will be allowed to sit for the exam.

A motion to certify the Master Well Driller Exam Applicants was made by R. Stothoff, seconded by A. Tirro, and approved unanimously. H. Papp noted that all applicants subject to the current apprentice requirement were provisionally approved. The Fee Rule, which removes the apprentice requirement from the current regulations, is expected to take effect on April 2, 2007. At that time, the applicants who have not fully completed an apprenticeship (and do not currently hold any category of drillers license) would be approved. A motion to

certify the Journeyman Well Driller Exam Applicants was made by R. Stothoff, seconded by P. Demicco, and approved unanimously.

A motion to certify the Journeyman B Well Driller Exam Applicants was made by R. Stothoff, seconded by P. Demicco, and approved unanimously.

- 4. Correction on Pump Installers Test** – S. Reya noted that he had made an error scoring Theodore Alberta's Pump Installer Exam. The initial scoring for the December Exam indicated a score of 100% on part one and 71% on part two. S. Reya stated that he had used the incorrect point total when scoring part two of the exam. The corrected scores would be amended to reflect a score of 80% on part two. Therefore, Mr. Alberta would receive a passing grade and be granted a Pump Installers License. A motion to approve Mr. Alberta's amended scores was made by A. Tirro, seconded by F. Sickels, and approved unanimously.
- 5. Test Applications** – A. Becker discussed clarifying several aspects of the current Journeyman Exam Application. All references to the apprentice well driller requirement will be removed after the Fee Rule is passed (anticipated April 2, 2007). Second, A. Becker suggested that bullet point #4 on page one should be reworded to state that all wells listed as experience had to be within the last three years of the signature date on the application. The current wording merely stated that three years of experience were required, which the Board agreed did not necessarily refer to the last three years. A. Becker also felt that the language in Section B should better state that a total of five wells are required to be listed amongst the reference questionnaires, not five wells on each reference questionnaire. Finally, A. Becker suggested that Section C should make it clear that the references had to be the driller of record for the five wells listed in the drilling experience chart. H. Papp will review the current applications and revise as necessary to facilitate the submittal of technically acceptable applications.
- 6. Testing Geothermal grout mixture – Morrison Inc.-** The Board reviewed item 13 on the minutes from the January Board meeting. S. Reya noted that the Bureau took the Board's input from the previous meeting and responded to Morrison, Inc. in a letter dated February 6, 2007. This letter stated that the December 1, 2006 proposal submitted by Morrison Inc. was insufficient and that additional proofs such as a field pumpability tests would be required before the Bureau would approve the use of the grout for the fourteen wells (previously installed) in question. Additionally, the lab testing was to be more stringent, as it was to be representative of the original T-111 grout testing to assess potential issues related to thermal cycling. Ed Lopez had reportedly contacted P. Bono after receiving the letter, and stated that Morrison Inc. representatives felt the requirements noted in the letter were unreasonable and that they would like to address the Board. F. Sickels, A. Becker, and V. Monaco all stated that the burden of proof to perform testing on the grout lies with Morrison.
- 7. Fee Rule and Other Program Updates-** P. Bono informed the Board that the Bureau had recently sent a mass mailing to all licensed well drillers in New Jersey. The fee increases for both well permit applications and driller/pump installer applications were addressed in the letter. P. Bono also noted that the GPS requirement would not take effect until July 2008.

She hopes to schedule a representative from the Department's GIS section to attend the next Board meeting and demonstrate how GIS and GPS systems are used.

P. Bono also informed the Board that the Water Supply website was recently updated to include well search questionnaires and other forms used by the Bureau. Board meeting schedules and minutes from past meetings would also be posted shortly. F. Sickels asked whether there had been any update to the E-permitting initiative. P. Bono said that the Bureau had not been formally contacted about entering E-permitting but she believes the Bureau is still a high priority.

- 8. Testing Geothermal grout mixture – Morrison Inc. (Continued)-** Ed Lopez, Rock Morrison, and Mike Rash, from Morrison Inc. arrived at 11:00 AM. None of the representatives are licensed to drill in NJ. R. Morrison informed the Board that Morrison Inc. began drilling in New Jersey approximately two years ago and staff were not very familiar with the state's regulations at the time. This resulted in construction and licensing errors. Additionally, he reiterated that the fourteen wells (see Item 6) contained a coarser form of bentonite, and that the grout for twelve of the wells did not contain superplasticizer. He stated that other than those two issues, the wells were properly grouted and asked whether there was any other way the problem could be resolved other than drilling out the wells or following the Bureau's strict testing requirements.

E. Lopez explained that Morrison Inc. has worked with T-111 since the job in question. He also claimed that the project, Newark Central High School, is currently three years behind schedule and site problems unrelated to the drilling have recently been resolved. Therefore, he felt that the additional requirements of the Board/Bureau were too expensive and time consuming. E. Lopez said that T-111 grout is very robust and they have used it very successfully. He also stated that it bonds to the loops extremely well. When using a pneumatic hammer to break the grout away from the poly loops, the grout apparently takes the writing off of the loops. Mr. Lopez also said that they purchase 3,000 lb. bags of pre-mixed grout so the sand and cement are well blended. E. Lopez felt that the grout mixture they used in the wells in question is "at least as good." According to Mr. Lopez, the wells in the field range from 150 to 300 GPM. He felt that this amount of water would keep the wells around the same temperature. He did not think much expansion and contraction would occur with the loops due to the heat exchange with the water in the formation. F. Sickels talked about the need for Morrison to provide additional data before the Department could assess the environmental impact, if any, of the altered grout mix.

E. Lopez requested that Morrison's initial testing proposal from December 1, 2006 be reevaluated. He also claimed that superplasticizer is only added for pumpability and bentonite is added to reduce sand-cement separation. Therefore, he believed that neither would alter the cured properties of the grout. R. Dalton noted that bentonite mesh size does alter how the grout sets up. He went on to say that every grout mix, including T-111, has undergone the same field test before being approved by the Department. He felt that the altered grout would have to be considered to be a new grout since it was not mixed in accordance with DEP regulations. A. Becker informed Morrison that the scientific burden of proof lies with Morrison. He also told the Morrison representatives that the Board and

Bureau have been reasonable in approving other grouts in the past if the field and lab test results were satisfactory. F. Sickels said that R. Dalton, P. Bono, and S. Reya could take another look at the December proposal. E. Lopez stated that 99% of the grout mix is correct since the superplasticizer and bentonite account for such a small amount of the grout mix. S. Reya clarified the fact that Morrison used a paddle mixer, not a colloidal mixer, so the opinion of Dr. Allan (inventor of T-111), which stated that it might be possible to omit the bentonite and superplasticizer, did not apply in Morrison's case. The field test stipulated in the Bureau's letter was also intended to address that issue.

R. Dalton noted that one company had proposed a geothermal grout mix for use in rock, which did not contain superplasticizer. He stated that the company had submitted some lab data but had never performed any field testing to compare the lab permeability to the field permeability so the grout was never approved. V. Monaco suggested that Morrison representatives review their December proposal, the Bureau's February response, and submit a revised proposal meeting the intent of the Bureau's concerns with less onerous testing. Therefore, the T-111 cementitious thermally enhanced grout is the only geothermal grout currently approved for use in consolidated formations. V. Monaco stated that the Bureau should not review the same proposal already submitted but would review a revised proposal that is more of a "middle ground" should Morrison submit a formal response.

- 9. Conflicts Between Driller/Pump Installer Regulations and Master Plumber Code-** Ben Primost, New Jersey Groundwater Association President and New Jersey Master Well Driller, and Paul Bent, Pathways Government relations, brought up concerns regarding the installation of water treatment equipment. B. Primost and P. Bent discussed the fact that licensed Master Plumbers, Well Drillers, and Pump Installers were all performing this work, however, regulations governing the activity are often vague. B. Primost also noted that there is a discrepancy in the enforcement of such regulations between local health departments and construction code officials. He also pointed out that the term "approved" water source, which is used to regulate the jurisdiction of plumbers, is not defined. Some counties apparently consider the water source to be approved once it has actually passed a water test, which is often not accomplished until some type of water treatment is added. Additionally, DEP regulations refer to "appurtenances" which is also undefined but has traditionally been interpreted to include the installation of water treatment equipment (in addition to storage tanks).

P. Bent added that the Department of Community Affairs, which regulates plumbers through the Master Plumbers Code, has stated that water treatment falls under the jurisdiction of DEP so drillers and pump installers could perform the work. He also said that comments in 2005 by N. Primost and DEP were addressed in the adoption of the new regulations in a statement claiming that they were not imposing on the well driller/pump installer business. P. Bent and B. Primost felt that the implementation of the regulations by local authorities was the problem, not the regulation itself. They also felt that many plumbers were misinterpreting the regulation and attempting to prevent drillers/pump installers from performing the work. V. Monaco suggested that they might want to get in touch with DCA and have them address the issue in their "Code Enforcer" publication to clarify the issue for inspectors. A. Becker

noted that the “house valve” should be looked at as a means of determining the cutoff between the two jurisdictions.

P. Bent stated that the Board of Examiners of Master Plumbers (under DCA) already agree that the jurisdiction to regulate the area would fall under DEP regulations regarding well drillers and pump installers. The New Jersey Groundwater Association will draft a letter to DCA to obtain something in writing. B. Primost and the Board also discussed whether DEP had any intention of developing a separate license for water treatment installers. B. Primost felt that since DEP regulates the treatment of large water systems, it would be a natural progression for them to regulate all forms of water treatment. F. Sickels, V. Monaco, and P. Bono said that as far as they were aware, the Department did not currently have any plans to do so. R. Stothoff felt that the biggest problem is not the Licensed Driller/Pump Installers and Master Plumbers, but those individuals who are unlicensed.

**10. Closing and Adjournment-** A. Becker requested that Bureau staff inform the Board as to the status of the Morrison issue. He also informed P. Bono that he had researched several GPS units that might meet the Department’s submittal requirements, while costing less than initially thought. He wished to add the item as an agenda for the next meeting. P. Bono stated that if he sent her the information, she could run it by the GIS specialists in DEP and they could discuss it at a presentation at the May meeting if possible.

Board members decided to postpone reviewing the current pump installer’s exam with S. Reya since N. Primost and J. Pepe were not present. Board members were notified to contact S. Reya if they preferred to meet as a subcommittee prior to the May meeting. A motion to adjourn the meeting was made at 12:28 PM by R. Stothoff, seconded by P. Demicco and approved by all.

**Action Items:**

- Contact GIS representative to speak about GIS/GPS systems and requirements at May meeting
- S. Reya to review pump installer’s exam after May meeting with several board members
- Notify Board Members if Bureau receives a response from Morrison, Inc.